H-267A

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED:

March 24, 1981

Forwarded to:

Honorable Ray A. Barnhart Administrator Federal Highway Administration 400 Seventh Street, S.W. Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-81-11 and -12

On June 5, 1980, about 12:47 a.m., a northbound Central Texas Bus Lines, Inc., charter bus, occupied by the driver and 32 passengers, accelerated out of control while descending a long, curved, steep grade on State Route 7 about 1 mile south of Jasper, Arkansas. The bus failed to negotiate a left curve and ran off the right pavement edge into a drainage channel. The bus continued for 280 feet, impacted the berm at a concrete culvert, was redirected across the highway, and vaulted down a steep embankment. Twenty bus occupants, including the driver, were killed and 13 passengers were injured. 1/

Because of the number of previous accidents on this hill, an escape ramp was being constructed 1,000 feet south of the accident site. A brake check area was being completed 0.9 mile north of the summit but was not yet marked or signed. The signing planned for the brake check area was to have been advisory but was made mandatory as a result of a recommendation made by the Safety Board. The Manual on Uniform Traffic Control Devices (MUTCD) does not recommend any specific signing for brake check areas, and practices throughout the country vary. National standards for such signing should be established.

The location of the brake check area (turnout or pull-off area) 1 mile past the crest of the hill is not in accord with the general recommendations of the MUTCD or the "Interim Guidelines for Design of Emergency Escape Ramps" (FHWA Technical Advisory T5040.10) which suggests that it should be at the hillcrest. Again, practices vary throughout the country, and it has not been positively shown that brake check areas should be at a hillcrest. Research should be accomplished to develop guidelines for optimal location.

^{1/} For more detailed information read "Central Texas Bus Lines, Inc., Charter Bus, State Route 7, near Jasper, Arkansas, June 5, 1980" (NTSB-HAR-81-1).

Brake check areas and escape ramps are generally not lighted. The "Interim Guidelines for Design of Emergency Escape Ramps" states that illumination is desirable for the ramp and its approach; however, no mention is made of brake check areas. The Safety Board believes that better usage of brake check areas would result if they were illuminated. Lighting would be especially desirable if diagrammetric signing of the hill is installed in these areas.

Therefore, the National Transportation Safety Board recommends that the Federal Highway Administration:

Develop national standards for the signing of brake check areas. (Class II, Priority Action) (H-81-11)

Conduct research to develop guidelines for the location and illumination of brake check areas. (Class II, Priority Action) (H-81-12)

King, Chairman, DRIVER, Vice Chairman, and McADAMS, GOLDMAN, and BURSLEY, Members, concurred in these recommendations.

By; James B. King

Chairman